

Amendments In the Claims

Please add Claims 31-34. Please amend Claims 1, 9, 16 and 23-30 as follows:

1. (Currently Amended) A method ~~of collecting network traffic data~~ comprising:
collecting network traffic data wherein said collecting comprises
 receiving a group of information[[]],
 determining whether to process the group of information for network traffic data collection, wherein
 said determining is performed according to a sampling algorithm, ~~that is~~
~~selected from one of~~
~~a linear sampling algorithm,~~
~~an exponential sampling algorithm,~~
~~a natural log sampling algorithm,~~
~~a burst sampling algorithm, and~~
~~selecting the group of information based on an examination of~~
~~traffic attribute data in the group of information;~~
 processing the group of information for network traffic data collection if the
 determination is to process the group of information[[]], and
 forwarding the group of information to a destination.
2. (Original) The method of Claim 1 wherein the group of information is an IP packet.
3. (Canceled)
4. (Original) The method of Claim 1 wherein forwarding the group of information to the destination comprises:
 identifying the destination using a forwarding table;
 if the destination is in the forwarding table, automatically forwarding the group of
 information to the destination; and

otherwise sending the group of information to one or more processing engines to determine routing to the destination and forwarding the group of information according to the determined routing.

5. (Original) The method of Claim 1 wherein forwarding the group of information to the destination is performed after processing the group of information.

6. (Previously Presented) The method of Claim 1 wherein the processing of the group of information for network traffic data collection comprises:

determining if the group of information is part of one or more recorded traffic flows;
creating a new entry in a table if the group of information is not part of the one or more recorded traffic flows;

incrementing a field in an existing entry in the table if the group of information is part of the one or more recorded traffic flows; and
time stamping the group of information.

7. (Previously Presented) The method of Claim 6 wherein the processing of the group of information for network traffic data collection further comprises:

creating a traffic information packet; and
transmitting the traffic information packet to a network traffic data collection application.

8. (Original) The method of Claim 7 wherein the traffic information packet comprises a header and one or more flow records.

9. (Currently Amended) An apparatus ~~for collecting network traffic data~~ comprising:

means for receiving a group of information; and

means for collecting network traffic data said means for collecting comprising

means for determining whether to process the group of information for network traffic data collection, wherein

the means for determining comprises a means for sampling, ~~selected from~~
one of

~~a means for linear sampling,~~
~~a means for exponential sampling,~~
~~a means for natural log sampling,~~
~~a means for burst sampling, and~~
~~a means for selecting the group of information based on an~~
~~examination of traffic attribute data in the group of~~
~~information;~~

means for processing the group of information for network traffic data collection
 if the determination is to process the group of information[[;]], and
 means for forwarding the group of information to a destination.

10. (Original) The apparatus of Claim 9 wherein the group of information is an IP packet.
11. (Canceled)
12. (Original) The apparatus of Claim 9 wherein the means for forwarding the group of information to the destination comprises:
 - means for identifying the destination using a forwarding table;
 - means for automatically forwarding the group of information to the destination if the destination is in the forwarding table; and
 - means for sending the group of information to one or more processing engines to determine routing to the destination and then forward the group of information according to the determined routing otherwise.
13. (Previously Presented) The apparatus of Claim 9 wherein the means for processing of the group of information for network traffic data collection comprises:
 - means for determining if the group of information is part of one or more recorded traffic flows;
 - means for creating a new entry in a table if the group of information is not part of the one or more recorded traffic flows;
 - means for incrementing a field in an existing entry in the table if the group of information is part of the one or more recorded traffic flows; and

means for time stamping the group of information.

14. (Previously Presented) The apparatus of Claim 13 herein the means for processing of the group of information for network traffic data collection further comprises:
means for creating a traffic information packet; and
means for transmitting the traffic information packet to a network traffic data collection application.

15. (Original) The apparatus of Claim 14 wherein the traffic information packet comprises a header and one or more flow records.

16. (Currently Amended) A network node comprising: for collecting network traffic data having one or more processing engines and a memory comprising a set of instructions to:

a processing engine, wherein

the processing engine is configured to collect network traffic data; and

a memory coupled to the processing engine and the memory is configured to store

instructions configured to cause the processing engine to

receive a group of information;

determine whether to process the group of information for network traffic data

collection according to a sample algorithm; wherein

~~the set of instructions to determine comprises a sampling algorithm~~

~~that is selected from one of~~

~~a linear sampling algorithm,~~

~~an exponential sampling algorithm,~~

~~a natural log sampling algorithm,~~

~~a burst sampling algorithm, and~~

~~selecting the group of information based on an examination of~~

~~traffic attribute data in the group of information;~~

process the group of information for network traffic data collection if the

determination is to process the group of information; and

forward the group of information to the destination.

17. (Original) The network node of Claim 16 wherein the group of information is an IP packet.

18. (Canceled)

19. (Original) The network node of Claim 16 wherein the set of instructions to forward the group of information to the destination comprises a set of instructions to:

identify the destination using a forwarding table;

if the destination is in the forwarding table, automatically forward the group of information to the destination; and

otherwise send the group of information to one or more processing engines to determine routing to the destination and forward the group of information according to the determined routing.

20. (Previously Presented) The network node of Claim 16 wherein the set of instructions to process the group of information for network traffic data collection comprises a set of instructions to:

determine if the group of information is part of one or more recorded traffic flows;

create a new entry in a table if the group of information is not part of the one or more recorded traffic flows;

increment a field in an existing entry in the table if the group of information is part of the one or more recorded traffic flows; and

time stamp the group of information.

21. (Previously Presented) The network node of Claim 20 wherein the set of instructions to process the group of information for network data collection further comprises a set of instructions to:

create a traffic information packet; and

transmit the traffic information packet to a network traffic data collection application.

22. (Original) The network node of Claim 21 wherein the traffic information packet comprises a header and one or more flow records.

23. **(Currently Amended)** A router comprising:
 one or more switch fabrics;
 one or more destination line cards coupled to the one or more switch fabrics;
 a source line card coupled to one of the one or more switch fabrics, wherein
 the source line card receives a data packet;
 a router processor, coupled to the switch fabric, and configured to
 determine whether to process the data packet for network traffic data collection
 according to a sample algorithm;
 process the data packet for network traffic data collection if the determination is
 to process the data packet; and
 forward forwards the data packet to one of the one or more destination line
 cards.
24. **(Currently Amended)** The **router apparatus** of Claim 23 wherein the data
 packet is an IP packet.
25. **(Currently Amended)** The **router apparatus** of Claim 23 wherein the **router
 processor is further configured to select the** sample algorithm **is selected** from one of **[[a]]**
 linear sampling **algorithm**, **an** exponential sampling **algorithm**, **[[a]]** natural log sampling
algorithm, **[[a]]** burst sampling **algorithm**, and selecting the data packet based on an
 examination of traffic attribute data in the data packet.
26. **(Currently Amended)** The **router apparatus** of Claim 23 wherein to forward
 the data packet to one of the one or more destination line cards, the source line card **is**
configured to:
 identify identifies the one of the one or more destination line cards using a forwarding
 table;
 if the one of the one or more destination line cards is in the forwarding table,
 automatically **forward forwards** the data packet to the one of the one or more
 destination line cards; and
 otherwise **send sends** the data packet to the router processor**[[s]]** **wherein the router
 processor is configured to**

determine routing to one of the one or more destination line cards, and then forward[[s]] the data packet according to the determined routing.

27. **(Currently Amended)** The **router apparatus** of Claim 26 wherein the router processor is located on the source line card.

28. **(Currently Amended)** The **router apparatus** of Claim 23 wherein to process the data packet for network traffic data collection, the source line card **is configured to:**
 determine[[s]] if the data packet is part of one or more recorded traffic flows;
 create[[s]] a new entry in a table if the data packet is not part of the one or more recorded traffic flows;
 increment[[s]] a field in an existing entry in the table if the data packet is part of the one or more recorded traffic flows; and
 time stamp[[s]] the data packet.

29. **(Currently Amended)** The **router apparatus** of Claim 28 wherein to process the data packet for network traffic data collection, the source line card **is further configured to:**
 create[[s]] a traffic information packet; and
 transmit[[s]] the traffic information packet to a network traffic data collection application.

30. **(Currently Amended)** The **router apparatus** of Claim 29 wherein the traffic information packet comprises a header and one or more flow records.

31. **(New)** The method of Claim 1 wherein said collecting further comprises:
 selecting the sample algorithm, wherein the sample algorithm is one of a linear, an exponential, a natural log, and a burst sample algorithm, and examination of traffic attribute data in the group of information.

32. **(New)** The apparatus of Claim 9 wherein the means for determining further comprises:
 means for selecting the means for sampling from one of
 a means for linear sampling,
 a means for exponential sampling,

a means for natural log sampling,
a means for burst sampling, and
a means for examining traffic attribute data in the group of information.

33. (New) The network node of Claim 16 having the memory further configured to store instructions to select the sample algorithm from one of
a linear sampling algorithm,
an exponential sampling algorithm,
a natural log sampling algorithm,
a burst sampling algorithm, and
selecting the group of information based on an examination of traffic attribute data in the group of information.

34. (New) The network node of Claim 16 wherein the network node further comprises:
a plurality of processing engines, wherein
the plurality of processing engines comprise the processing engine.